No. 200000249

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Enza Zaden Beheer B.V.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR PORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE E PURPOSE , OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE SE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT D BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

LETTUCE

'Outback'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twelfth day of December, in the year two thousand and five.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

REPRODUCE LOCALLY. *Include form number and date on all reproductions* — Form Approved - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER
Enza Zaden Beheer B.V.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME

3. VARIETY NAME
OUTBACK

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*
Postbus 7, Haling 1e
1600 AA , 1602 DB ENKHUIZEN
The Netherlands

5. TELEPHONE *(include area code)*
0031228350100

6. FAX *(include area code)*
0031228315960

FOR OFFICIAL USE ONLY

PVPO NUMBER
200000249

FILING DATE
5/18/2000

7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.)*
Corporation

8. IF INCORPORATED, GIVE STATE OF INCORPORATION
Noord Holland

9. DATE OF INCORPORATION
1936

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. *(First person listed will receive all papers)*
Mrs. Manon Knol
Enza Zaden Beheer B.V.
Postbus 7, Haling 1e
1600 AA , 1602 DB ENKHUIZEN
The Netherlands

FEES RECEIVED
FILING AND EXAMINATION FEES:
$ 2,450.00
DATE 5/18/2000
CERTIFICATION FEE:
$ 682
DATE 11/3/05

11. TELEPHONE *(include area code)*
0031228350218

12. FAX *(include area code)*
0031228315960

13. E-MAIL
m.knol@enzazaden.nl

14. CROP KIND *(Common Name)*
Lettuce

16. FAMILY NAME *(Botanical)*
Lactuca sativa L.

15. GENUS AND SPECIES NAME OF CROP
Lactuca sativa L.

17. IS THE VARIETY A FIRST GENERATION HYBRID?
☐ YES ☑ NO

18. DOES THE VARIETY CONTAIN ANY TRANSGENES? ***(OPTIONAL)***
☐ YES ☐ NO
IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERICALIZATION. _____

19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED
(Follow instructions on reverse)

a. ☑ Exhibit A. Origin and Breeding History of the Variety
b. ☑ Exhibit B. Statement of Distinctness
c. ☑ Exhibit C. Objective Description of Variety
d. ☐ Exhibit D. Additional Description of the Variety *(Optional)*
e. ☑ Exhibit E. Statement of the Basis of the Owner's Ownership
f. ☐ Voucher Sample *(2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository)*
g. ☑ Filing and Examination Fee ($3,652), made payable to "Treasurer of the United States" *(Mail to the Plant Variety Protection Office)*

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? *(See Section 83(a) of the Plant Variety Protection Act)*
☐ YES *(If "yes", answer items 21 and 22 below)* ☑ NO *(If "no", go to item 23)*

21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES?
☐ YES ☑ NO
IF YES, WHICH CLASSES? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☐ YES ☑ NO
IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS.
☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED
(If additional explanation is necessary, please use the space indicated on the reverse.)

23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?
☑ YES ☐ NO
IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. *(Please use space indicated on reverse.)*

24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT *(PLANT BREEDER'S RIGHT OR PATENT)*?
☐ YES ☑ NO
IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. *(Please use space indicated on reverse.)*

25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER		SIGNATURE OF OWNER	
NAME *(Please print or type)* R.J.P. Peerenboom	Enza Zaden Beheer B.V. Postbus 7 1600 AA Enkhuizen The Netherlands	NAME *(Please print or type)*	
CAPACITY OR TITLE: commercial director	DATE: 06/20/2005	CAPACITY OR TITLE: commercial director	DATE: 06/20/2005

(See reverse for instructions and information collection burden statement)

REPRODUCE LOCALLY. *Include form number and date on all reproductions* — Form Approved - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

RAD 6/27/05

1 NAME OF OWNER
~~Yates Vegetable Seeds~~ Enza Zaden Beheer B.V.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME

3. VARIETY NAME
Outback

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*
~~13/19 Chifley Street~~
~~Smithfield 2164 AUSTRALIA~~
Gerrit Sassen
Enza Zaden Beheer B.V.
Enkhuizen
The Netherlands

5. TELEPHONE *(include area code)*
00.31.228.351318

6. FAX *(include area code)* RAD 6/27/05
~~61297251066~~

FOR OFFICIAL USE ONLY

PVPO NUMBER
20000249

FILING DATE
May 18, 2000

7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.)*
Corporation

8. IF INCORPORATED, GIVE STATE OF INCORPORATION
~~New South Wales~~

9. DATE OF INCORPORATION
~~Jan. 1997~~

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. *(First person listed will receive all papers)*

RAD 6/27/05
~~Marcel Bruins~~
~~Seminis Vegetable Seeds, Inc.~~
~~Nude 54D~~
6702 DN Wageningen
~~The Netherlands~~

Mr. D. S. Trimboli
13/19 Chifley Street
Smithfield 2164
Australia

RAD 7/25/05

FEES RECEIVED
FILING AND EXAMINATION FEES:
$ 2450. –
DATE May 18, 2000
CERTIFICATION FEE:
$
DATE

11. TELEPHONE *(Include area code)*
612 97 25 12 00

12. FAX *(Include area code)*
fax 612 97 25 10 66

13. E_MAIL
~~mbruins@svseeds.nl~~

14. CROP KIND *(Common Name)*
Lettuce

15 GENUS AND SPECIES NAME OF CROP
Lactuca sativa

16. FAMILY NAME *(Botanical)*
Asteraceae

17. IS THE VARIETY A FIRST GENERATION HYBRID?
☐ YES ☒ NO

18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)

a. ✔ Exhibit A. Origin and Breeding History of the Variety
b. ✔ Exhibit B. Statement of Distinctness
c. ✔ Exhibit C. Objective Description of Variety
d. ☐ Exhibit D. Additional Description of the Variety *(Optional)*
e. ✔ Exhibit E. Statement of the Basis of the Owner's Ownership
f. ☐ Voucher Sample *(2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository)*
g. ✔ Filing and Examination Fee ($2,450), made payable to "Treasurer of the United States" *(Mail to the Plant Variety Protection Office)*

19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? *See Section 83(a) of the Plant Variety Protection Act)*
☐ YES *(If "yes", answer items 20 and 21 below)* ☒ NO *(If "no," go to item 22)*

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☐ YES ☒ NO

21. IF "YES" TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?
☒ YES 5/21/99 USA ☐ NO
IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. *(Please use space indicated on reverse.)*

23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT *(PLANT BREEDER'S RIGHT OR PATENT)*?
☐ YES ☒ NO
IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. *(Please use space indicated on reverse.)*

24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER	SIGNATURE OF OWNER
NAME *(Please print or type)* Yates Vegetable Seeds / DANIEL TRIMBOLI	NAME *(Please print or type)*
CAPACITY OR TITLE Manager, R&D	DATE 9-May-00
CAPACITY OR TITLE	DATE

200000249

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be **received** in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to **reproduce** the variety, or for tuber reproduced varieties verification that a viable *(in the sense that it will reproduce an entire plant)* tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for $3,652 ($432 filing fee and $3,220 examination fee), payable to "Treasurer of the United States" *(See Section 97.6 of the Regulations and Rules of Practice.)* Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of $432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office
Telephone: (301) 504-5518
FAX: (301) 504-5291
Homepage: http://www.ams.usda.gov/science/pvpo/pvpindex.htm

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 http://www.ams.usda.gov/lsg/seed.htm.

ITEM

19a. Give:
(1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified

19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:

(1) identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.

19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.

19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, *etc.*

19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.

20. If "Yes" is specified *(seed of this variety be sold by variety name only, as a class of certified seed)*, the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. *(See Regulations and Rules of Practice, Section 97.103).*

23. *See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.*

24. *See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.*

22. CONTINUED FROM FRONT *(Please provide a statement as to the limitation and sequence of generations that may be certified.)*

23. CONTINUED FROM FRONT *(Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)*

5/21/1999 USA

24. CONTINUED FROM FRONT *(Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)*

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. *(See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)*

Exhibit A

200000249

Origin and Breeding History of Outback

In October 1994 the cross (F_1) between Green Towers (female) and the breeding line Lobjoits x LE 075 (male and source of resistance to corky root) was made. The F_1 was selfed and its progeny (F_2) screened for resistance to corky root. Resistant plants were backcrossed to Green Towers. Prior to each subsequent backcross, selfing of each backcrossed plant occurred and resistant progeny identified as listed above. The total number of backcrosses was three. The final backcross was then selfed and one resistant progeny selected at random. This plant (#4) was selfed and carried on for field evaluation.

This breeding was carried out at the Yates Research Station, N.S.W., Australia by Mr. D. S. Trimboli.

1994	Green Towers	X (LJ x LE 075)
		↓
		F_1
		↓
1995	Green Towers bc1	F_2 (CRR)
		↓
		F_1
		↓
1996	Green Towers bc2	F_2 (CRR)
		↓
		F_1
		↓
1997	Green Towers bc3	F_2 (CRR)
		↓
		F_1
		↓
		F_2 (CRR)
		↓
	Self 1	Foundation seed
		↓
	Self 2	Parent and trial seed
		↓
	Self 3	Outback Commercial Seed

4

Exhibit A

Selection and Multiplication

A single F2 plant (#4) originating from selfing the F1 of backcross three was found to be resistant to corky root. Its progeny, Self 1, was multiplied in the field & Self 2 used for trials in California in 1998.

No vigorous selection was required in Outback because of the number of backcrosses used in the breeding. This was evident in Self 2 generation, which was novel and uniform and therefore used as parent seed. This produced commercial seed in the 1998/9 seed production season in Australia. The commercial seed is Self 3.

Uniformity/Distinctness /Stability

The S1, S2 and S3 progenies of Outback have shown uniform phenotypic characteristics for each generation. In addition these three generations were resistant to the corky root bacterium (*Rhizomaonas suberfiaciens* – N.S.W. Agriculture Herbarium # DAR69823) – in greenhouse tests at Narromine, Australia in April 1999.

Similarly the three generations have shown to be resistant to corky root in field trials in California.

The resistance to corky root in each generation indicates that Outback is distinct compared to the comparator variety, Green Towers, which is susceptible to corky root. Outback therefore, is uniform and stable for phenotype & disease resistance over three generations.

Variants

No variants as mutations have been observed in Outback. However, natural outcrosses can randomly occur but at a frequency of < 0.1%.

Exhibit B

Novelty Statement of Outback

Outback is a tall, robust, medium-green romaine lettuce belonging to the Parris Island Cos class. It is most similar to the commercial variety Green Towers.

When trialled and assessed for phenotypic characteristics, Outback produced a seed stalk more slowly than Green Towers at 55.4 and 53.7 days in 1999 and 64.3 and 62.2 days in 2000 respectively.

When trialled in Australia in 2000, bolting plants of Outback had a greater diameter than Green Towers at 36.7 and 34.2cm respectively. When trialled in the US, Outback had a lower core height than Green Towers at 71.6 and 80.0mm respectively.

The major difference between Outback and Green Towers is that Outback is resistant to corky root rot (*Rhizomonas suberifaciens*) and Green Towers is susceptible. This resistance contributes enormously to Outback's uniformity, earliness of maturity, height and head weight compared to Green Towers when both are grown in soil infested with the corky root bacterium. The differences between Outback and Green Towers are greater, proptionately to the severity of corky root in the field.

The resistance of Outback to corky root over two generations has been verified by DNA/molecular marker technology at Enza Zaden, Enkhuizen, Netherlands on 24th May, 2005. The marker is closely linked to the corky root resistance gene as described by:

Moreno-Vazquez, S. et al. (2003). SNP-based codominant markers for a recessive gene for conferring resistance to corky root rot (Rhizomonas suberifaciens) in lettuce (Lactuca sativa). Genome, 46 : 1059-1069.

Seed was used as the source of DNA and seedlots Outback- stockseed and Outback – commercial seed, represent generation one and two of Outback respectively. The number of seeds tested per seedlot was 36.

The results indicate that each Outback generation is homozygous resistant (RR) to corky root which clearly indicates repeatability between generations. The comparator, Green Towers, is homozygous recessive (susceptible – rr) for the corky root gene, indicating the distinctness of Outback compared to Green Towers. Gladiator, Augustus, King Henry

and E16.LE157 are resistant romaine varieties and the results confirm its homozygous resistance to corky root. Green Forest is also a susceptible romaine and the test confirmed this. This information is listed in Figure 2A and 2B. The results in Figure 2B are expressed in a microtitre plate format.

Therefore Outback is suited to lettuce growing areas especially where corky root is a problem. These areas include coastal California during summer and fall as well as northeastern states such as New Jersey.

Evaluation of Characteristics of Outback and Green Towers

Note: It was decided to conduct the Australian and American trials in soil not infested with corky root because plants grown in corky root-infested soil would perform poorly and inconsistently depending upon the severity of corky root in the soil. This applies essentially to the susceptible variety whose characteristics would be detrimentally affected by the disease. As levels of corky root vary in soil it would be difficult to reproduce trial results consistently when the severity of corky root in the soil cannot be quantified.

Owing to timing, both bolting trials had to be carried our in Australia.

The data are listed in Table1.

Table 1:
Evaluation of Characteristics of Outback and Green Towers in Australia and United States

	Australia		United States	
	Outback	**Green Towers**	**Outback**	**Green Towers**
Spread of Frame Leaves (cm)				
Mean	54.6	52.9	40.5	39.3
Variance	1.6	4.3	3.19	3.55
t-value	-2.2090		-1.7394	
Head diameter (cm)				
Mean	30.1	29.6	16.8	16.3
Variance	1.43	1.82	2.87	3.8
t-value	-0.8763		-0.799	
Head weight (g)				
Mean	667.5	590	956.6	1015
Variance	2090.2	8222.2	16916.66	5517.85
t-value	-2.4133		1.5083	
Core height (mm)				
Mean	49	47.5	71.6	80
Variance	4.88	33.3	30.54	37.06
t-value	-0.7666		*** 3.9879**	
Maturity (days)				
Mean	52.1	52.5	94.2	93.5
Variance	0.62	2.36	1.17	1.12
t-value	1.0346		-1.7042	
	1999	**1999**	**2000**	**2000**
No. days to seed stalk emergence				
Mean	55.4	53.7	64.3	62.2
Variance	2.19	2.3	1.22	3.62
t-value	*** -5.4448**		***-4.6299**	
Height of mature seed stalk (cm)				
Mean	85.9	84.9	120.7	120.7
Variance	21.75	16.59	17.41	8.85
t-value	-1.119		-0.0101	
Spread of bolter plant (cm)				
Mean	42.9	40.6	36.7	34.2
Variance	13.2	4.34	6.21	3.35
t-value	-2.4551		***-3.161**	

* = significant at 0.01

Note: trial conditions must have varied between sites and seasons, causing the results not to be duplicated in either country.

8

FIGURE 2A

CORKY ROOT MARKER PLATE RESULTS

Outback stockseed - Generation 1	RR resistant
Outback commercial seed – Generation 2	RR resistant
Green Towers	rr susceptible
Green Forest	rr susceptible
E16.LE157	RR resistant
King Henry	RR resistant
Augustus	RR resistant
Gladiator	RR resistant

24th May, 2005

Overview of to be tested microtiterplates

Numbers of plates to be tested:

Total plates:	Microtiterplate number	To be tested with the markers:	Program	Harvest date:	Analysis date:
1	NL 05-402	CR	CR toets voor Kees/Dan	24-05-2005	
2	NL 05-403	CR	CR toets voor Kees/Dan	24-05-2005	
3	NL 05-404	CR	FIGURE 2 B	24-05-2005	
4					
5					
6					
7					
8					
9					
10					

MICROTITERPLATE # NL 05-402 **Resistances:** CR **Date harvest:** 24-05-2005

Material: DNA-isolation: CTAB/Promega/Kac DNA-check: yes / no

If seeds, which positions: A1 - H12

Program : CR roets voor Kees/Dam Results scored by: Date: **00-00-0000**

A	Plant #	CR	B	Plant #	CR	C	Plant #	CR	D	Plant #	CR
1	**Outback stockseed**	RR	1			1	-24	RR	1		
2	-2	RR	2	-13	RR	2	-25	RR	2	-2	RR
3	-3	RR	3	-14	RR	3	-26	RR	3	-3	RR
4	-4	RR	4	-15	RR	4	-27	RR	4	-4	RR
5	-5	RR	5	-16	RR	5	-28	RR	5	-5	RR
6	-6	RR	6	-17	RR	6	-29	RR	6	-6	RR
7	-7	RR	7	-18	RR	7	-30	RR	7	-7	RR
8	-8	RR	8	-19	RR	8	-31	RR	8	-8	RR
9	-9	RR	9	-20	RR	9	-32	RR	9	-9	RR
10	-10	RR	10	-21	RR	10	-33	RR	10	-10	RR
11	-11	RR	11	-22	RR	11	-34	RR	11	-11	RR
12	-12	RR	12	-23	RR	12	**Outback commercial seed**	RR	12	-12	RR

E	Plant #	CR	F	Plant #	CR	G	Plant #	CR	H	Plant #	CR
1	-13	RR	1			1	-2	rr	1		
2	-14	RR	2	-25	RR	2	-3	rr	2	-14	rr
3	-15	RR	3	-26	RR	3	-4	rr	3	-15	rr
4	-16	RR	4	-27	RR	4	-5	rr	4	-16	rr
5	-17	RR	5	-28	RR	5	-6	rr	5	-17	rr
6	-18	RR	6	-29	RR	6	-7	rr	6	-18	rr
7	-19	RR	7	-30	RR	7	-8	rr	7	-19	rr
8	-20	RR	8	-31	RR	8	-9	Rr	8	-20	rr
9	-21	RR	9	-32	RR	9	-10	Rr	9	-21	rr
10	-22	RR	10	-33	RR	10	-11	Rr	10	-22	rr
11	-23	RR	11	-34	Rr	11	-12	rr	11	-23	rr
12	-24	RR	12	**Green Forest**	rr	12	-13	rr	12	-24	rr

2000249

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N85

T2

MICROTITERPLATE # NL 05-403 **Resistances:** CR **Date harvest:** 24-05-2005

Material: DNA-isolation: CTAB/Promega/Kac DNA-check: yes / no

If seeds, which positions: A1 - H12

Program : CR tests voor Kees/Dan Results scored by: Date: **00-00-0000**

ENZA ZADEN

NL 05-403

A	Plant #	CR	B	Plant #	CR	C	Plant #	CR	D	Plant #	CR
1	Green Forest	?	1			1	-14	?	1		
2	-26	rr	2	-3	RR	2	-15	RR	2	-26	RR
3	-27	rr	3	-4	RR	3	-16	RR	3	-27	RR
4	-28	rr	4	-5	RR	4	-17	RR	4	-28	RR
5	-29	rr	5	-6	RR	5	-18	RR	5	-29	RR
6	-30	rr	6	-7	RR	6	-19	RR	6	-30	RR
7	-31	rr	7	-8	RR	7	-20	RR	7	-31	RR
8	-32	rr	8	-9	RR	8	-21	RR	8	-32	RR
9	-33	rr	9	-10	RR	9	-22	RR	9	-33	RR
10	-34	rr	10	-11	RR	10	-23	RR	10	-34	RR
11	E16.LE157	RR	11	-12	RR	11	-24	RR	11	King Henry	RR
12	-2	Rr	12	-13	RR	12	-25	RR	12	-2	RR

E	Plant #	CR	F	Plant #	CR	G	Plant #	CR	H	Plant #	CR
1	-3	?	1			1	-26	RR	1		
2	-4	RR	2	-15	RR	2	-27	RR	2	-4	RR
3	-5	RR	3	-16	RR	3	-28	RR	3	-5	RR
4	-6	RR	4	-17	RR	4	-29	RR	4	-6	RR
5	-7	RR	5	-18	RR	5	-30	RR	5	-7	RR
6	-8	RR	6	-19	RR	6	-31	RR	6	-8	RR
7	-9	RR	7	-20	RR	7	-32	RR	7	-9	RR
8	-10	RR	8	-21	RR	8	-33	RR	8	-10	RR
9	-11	RR	9	-22	RR	9	-34	RR	9	-11	RR
10	-12	RR	10	-23	RR	10	Augustus	RR	10	-12	RR
11	-13	RR	11	-24	RR	11	-2	RR	11	-13	RR
12	-14	RR	12	-25	RR	12	-3	RR	12	-14	RR

Opmerking:

NL 05-403

N8ç

20000249

MICROTITERPLATE # NL 05-404 **Resistances:** CR **Date harvest:** 24-05-2005

Material: DNA-isolation: CTAB/Promega/Kac DNA-check: yes / no

If seeds, which positions: A1 - H12

Program : FIGURE 2 B Results scored by: Date: 00-00-0000

NL 05-404

A	Plant #	CR	B	Plant #	CR	C	Plant #	CR	D	Plant #	CR
1	Augustus	RR	1	Control		1	-4	rr	1	Control	
2	-16	RR	2	-27	RR	2	-5	rr	2	-16	rr
3	-17	RR	3	-28	RR	3	-6	rr	3	-17	rr
4	-18	RR	4	-29	RR	4	-7	rr	4	-18	rr
5	-19	RR	5	-30	RR	5	-8	rr	5	-19	rr
6	-20	RR	6	-31	RR	6	-9	rr	6	-20	rr
7	-21	RR	7	-32	RR	7	-10	rr	7	-21	rr
8	-22	RR	8	-33	RR	8	-11	rr	8	-22	rr
9	-23	RR	9	-34	RR	9	-12	rr	9	-23	rr
10	-24	RR	10	Green Towers	rr	10	-13	rr	10	-24	rr
11	-25	RR	11	-2	rr	11	-14	rr	11	-25	rr
12	-26	RR	12	-3	rr	12	-15	rr	12	-26	rr

E	Plant #	CR	F	Plant #	CR	G	Plant #	CR	H	Plant #	CR
1	-27	rr	1	Control		1	-14	RR	1	Control	
2	-28	?	2	-3	RR	2	-15	RR	2	-26	RR
3	-29	rr	3	-4	RR	3	-16	RR	3	-27	RR
4	-30	rr	4	-5	RR	4	-17	RR	4	-28	RR
5	-31	rr	5	-6	RR	5	-18	RR	5	-29	RR
6	-32	rr	6	-7	RR	6	-19	RR	6	-30	RR
7	-33	rr	7	-8	RR	7	-20	RR	7	-31	RR
8	-34	rr	8	-9	RR	8	-21	RR	8	-32	RR
9	-35	rr	9	-10	RR	9	-22	RR	9	-33	RR
10	-36	x	10	-11	RR	10	-23	RR	10	-34	RR
11	Gladiator	RR	11	-12	RR	11	-24	RR	11	-35	RR
12	-2	RR	12	-13	RR	12	-25	RR	12	-36	RR

2000249

3

N8ç

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION

EXHIB

OBJECTIVE DESCRIPTION OF VARIETY
LETTUCE *Lactuca sativa*

RAD 6/29/05

NAME OF APPLICANT (S)

~~Seminis Vegetable Seeds, Inc.~~ Enza Zaden Beheer B.V.

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)

~~3.7437 State Hwy 16~~
~~Woodland, CA 95695 USA~~

FOR OFFICIAL USE ONLY

PVPO NUMBER 200000249

VARIETY NAME 'Outback'

EXPERIMENTAL DESIGNATION

Place numbers in the boxes for the characters which best describe this variety. Measured data should be the mean of an appropriate number (at least 10) of w spaced plants. Royal Horticultural Society or any recognized color standard may be used to determine plant colors.

The location of the test area is: Narromine, NSW, Australia, & Huron, Calif.

Color System Used:

1. PLANT TYPE: *(See list of suggested check varieties page 4.)*

[0][4]

01=Cutting/Leaf
02=Butterhead
03=Bibb
04=Cos or Romaine
05=Great Lakes Group
06=Vanguard Group
07=Imperial Group
08=Eastern (Ithaca) Group
09=Stem
10=Latin
11=OTHER

2. SEED:

COLOR: [1] 1=White (Silver Gray) 2=Black (Gray Brown) 3=Brown (Amber)

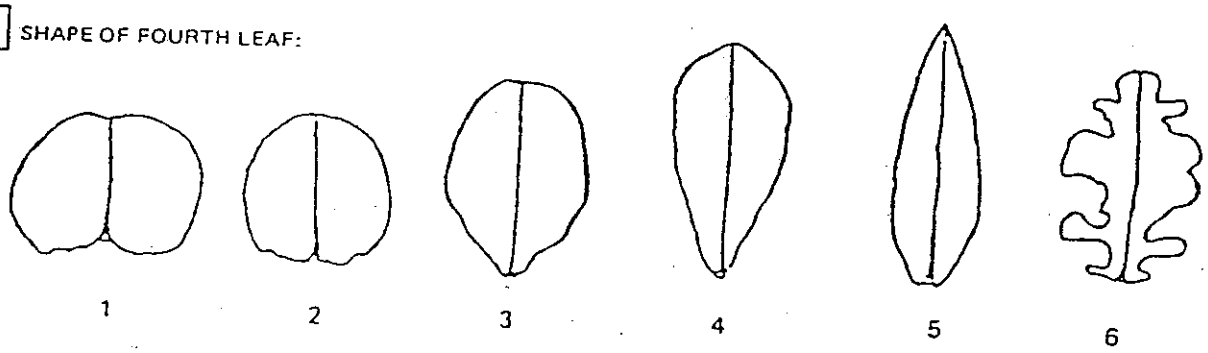
LIGHT DORMANCY: [2] 1=Light Required 2=Light Not Required

HEAT DORMANCY: [2] 1=Susceptible 2=Not Susceptible

3. COTYLEDON TO FOURTH LEAF STAGE: NOTE: Provide a color photograph or photocopy of the fourth leaf from 20 day old seedling grown under optimal conditions.

[2] SHAPE OF COTYLEDONS: 1=Broad 2=Intermediate 3=Spatulate

[4] SHAPE OF FOURTH LEAF:



[2][0] LENGTH/WIDTH INDEX OF FOURTH LEAF: L/W x 10

[1] APICAL MARGIN:
[4] BASAL MARGIN:
1=Entire 2=Crenate/Gnawed 3=Finely Dentate 4=Moderately Dentate 5=Coarsely Dentate 6=Incised 7=Lobed 8=OTHER *(specify)*

[1] UNDULATION: 1=Flat 2=Slight 3=Medium 4=Marked

[3] GREEN COLOR: 1=Yellow Green 2=Light Green 3=Medium Green 4=Dark Green 5=Blue Green 6=Silver Green 7=Gray Green

ANTHOCYANIN:

[1] DISTRIBUTION: 1=Absent 2=Margin Only 3=Spotted 4=Throughout 5=OTHER *(specify)*

[ ] CONCENTRATION: 1=Light 2=Moderate 3=Intense

[1] ROLLING: 1=Absent 2=Present

[1] CUPPING: 1=Uncupped 2=Slight 3=Markedly

[1] REFLEXING: 1=None 2=Apical Margin 3=Lateral Margins

4. MATURE LEAVES *(observe harvest-mature outer leaves)*:

NOTE: Provide color photo of harvest-mature leaves which accurately shows color and margin characteristics. 200000249

MARGIN:

[1]	INCISION DEPTH: *(deepest penetration of the margin)*	1=Absent/Shallow (Dark Green Boston)	2=Moderate (Vanguard)	3=Deep (Great Lakes 659)
[2]	INDENTATION: *(finest divisions of the margin)*	1=Entire (Dark Green Boston) 2=Shallowly Dentate (Great Lakes 65)	3=Deeply Dentate (Great Lakes 659) 4=Crenate (Vanguard)	5=OTHER *(specify)*
[1]	UNDULATION OF THE APICAL MARGIN:	1=Absent/Slight (Dark Green Boston)	2=Moderate (Vanguard)	3=Strong (Great Lakes 659)
[4]	GREEN COLOR:	1=Very Light Green (Bibb) 2=Light Green (Minetto)	3=Medium Green (Great Lakes) 4=Dark Green (Vanguard)	5=Very Dark Green 6=OTHER

ANTHOCYANIN *(grown at or below 10 C)*:

[1]	DISTRIBUTION:	1=Absent 2=Margin Only (Big Boston)	3=Spotted (Calif. Cream Butter) 4=Throughout (Prize Head)	5=OTHER *(specify)*
[ ]	CONCENTRATION:	1=Light (Iceberg)	2=Moderate (Prize Head)	3=Intense (Ruby)
[3]	SIZE:	1=Small	2=Medium	3=Large
[1]	GLOSSINESS:	1=Dull (Vanguard)	2=Moderate (Salinas)	3=Glossy (Great Lakes)
[1]	BLISTERING:	1=Absent/Slight (Salinas)	2=Moderate (Vanguard)	3=Strong (Prize Head)
[3]	LEAF THICKNESS:	1=Thin	2=Intermediate	3=Thick
[1]	TRICHOMES:	1=Absent (smooth)	2=Present (spiny)	

5. PLANT *(at market stage. Choose a comparison variety appropriate for this type.)*:

SPREAD OF FRAME LEAVES:
[5][4] cm This Variety [5][2] cm Green Towers *(specify comparison variety)*

HEAD DIAMETER *(market trimmed with single cap leaf)*:
[3][0] cm This Variety [2][9] cm Green Towers *(specify comparison variety)*

JEM 4 6/24/05 [6]	HEAD SHAPE:	1=Flattened 2=Slightly Flattened	3=Spherical 4=Elongate	5=Non-Heading 6=OTHER Romaine
[3]	HEAD SIZE CLASS:	1=Small	2=Medium	3=Large

[2][4] HEAD COUNT PER CARTON

HEAD WEIGHT:
[6][6][7] g This Variety [5][9][0] g Green Towers *(specify comparison variety)*

[2]	HEAD FIRMNESS:	1=Loose 2=Moderate	3=Firm 4=Very Firm

6. BUTT *(bottom of market-trimmed head)*:

[3]	SHAPE:	1=Slightly Concave	2=Flat	3=Rounded
[2]	MIDRIB:	1=Flattened (Salinas)	2=Moderately Raised	3=Prominently Raised (Great Lakes 659)

7. CORE *(stem of market-trimmed head)*:

[4][3] mm Diameter at base of head

[ ][6].[9] Ratio of head diameter/core diameter

Core height from base of head to apex:
[4][9] mm This Variety [4][7] mm Green Towers *(specify comparison variety)*

8. BOLTING *(Give First Water Date _____)*: NOTE: First Water Date is the date seed first receives adequate moisture to germinate. This can and often does equal the planting date.

Number of days from First Water Date to seed stalk emergence *(summer conditions)*:
[ ][5][5] This Variety [ ][5][3] Green Towers *(specify comparison variety)*

[3]	BOLTING CLASS:	1=Very Slow 2=Slow	3=Medium 4=Rapid	5=Very Rapid

Height of mature seed stalk:
[ ][8][5] cm This Variety [ ][8][4] cm Green Towers *(specify comparison variety)*

BOLTING cont'd. on next page

200000249

Spread of Bolter Plant *(at widest point)*:

[4][2] cm This Variety [3][6] cm Green Towers *(specify comparison variety)*

[1] BOLTER LEAVES: 1=Straight 2=Curved

[1] MARGIN: 1=Entire 2=Dentate

[2] COLOR: 1=Light Green 2=Medium Green 3=Dark Green

BOLTER HABIT:

[2] TERMINAL INFLORESCENCE: 1=Absent 2=Present

[1] LATERAL SHOOTS: *(above head)* 1=Absent 2=Present

[1] BASAL SIDE SHOOTS: 1=Absent 2=Present

9. MATURITY *(earliness of harvest-mature head formation)*:

NOTE: Complete this section for at least one season.

SEASON	Applic. 1/ # of days	Check 1/ # of days	CHECK VARIETY 2/
Spring	[5][2]	[5][2]	Green Towers
Summer	[ ][ ][ ]	[ ][ ][ ]	
Fall	[ ][ ][ ]	[ ][ ][ ]	
Spring (Date)	[9][4]	[9][3]	Green Towers

Give planting date(s), and location(s):

Spring Narromine, NSW, Australia - "Transplanted" 15 Sept. '99

Summer

SPRING Huron, California - Sown 10 January 2000

Winter

1/ First water date to harvest. 2/ Fill in check variety name on the appropriate line.

10. ADAPTATION:

PRIMARY REGIONS OF ADAPTION *(tested and proven adapted)*: (0=Not tested 1=Not Adapted 2=Adapted)

[2] Southwest *(Calif., Ariz. desert)* [2] West Coast [2] Northeast

[ ] Northcentral [ ] Southeast [ ] OTHER

SEASON:

[ ] Spring (area West Coast) [ ] Fall (area Northeast)

[ ] Summer (area West Coast) [ ] Winter (area Southwest)

[0] GREENHOUSE: 0=Not tested 1=Not Adapted 2=Adapted

[1] SOIL TYPE: 1=Mineral 2=Organic 3=Both

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11. DISEASES AND STRESS REACTIONS (0=Not tested; 1=Susceptible; 2=Intermediate; 3=Resistant; 4=Highly resistant; 5=Tolerant):

VIRUS

- [1] Big Vein
- [1] Lettuce Mosaic
- [0] Cucumber Mosaic
- [0] Broad Bean Wilt
- [0] Turnip Mosaic
- [0] Beet Western Yellows
- [0] Lett. Infectious Yellows
- [ ] Other Virus _____

FUNGAL/BACTERIAL

- [0] Corky Root Rot (Pythium Root Rot)
- [1] Downy Mildew (Races _____)
- [0] Powdery Mildew
- [2] Sclerotinia Rot
- [0] Bacterial Soft Rot (Pseudomonas spp. & others)
- [0] Botrytis (Gray Mold)
- [3] OTHER Corky Root (Rhizomonas Suberifaciens)

INSECTS

- [1] Cabbage Loopers
- [1] Root Aphids
- [1] Green Peach Aphid
- [ ] Other Insect _____

PHYSIOLOGICAL/STRESS

- [2] Tipburn
- [2] Heat
- [0] Drought
- [2] Cold
- [0] Salt
- [0] Brown Rib (Rib Discoloration, Rib Blight)
- [ ] OTHER _____

POST HARVEST

- [0] Pink Rib
- [0] Russet Spotting
- [0] Rusty Brown Discoloration
- [0] Internal Rib Necrosis (Blackheart, Gray Rib, Gray Streak)
- [0] Brown Stain

12. BIOCHEMICAL OR ELECTROPHORETIC MARKERS: See Attached

13. COMMENTS:

SUGGESTED CHECK VARIETIES

TYPE	CHECK VARIETY
1) CUTTING/LEAF	SALAD BOWL
2) BUTTERHEAD	DARK GREEN BOSTON
3) BIBB	BIBB
4) COS, OR ROMAINE	PARRIS ISLAND
5) GREAT LAKES GROUP	GREAT LAKES 659-700
6) VANGUARD GROUP	VANGUARD
7) IMPERIAL GROUP	VIVA
8) EASTERN GROUP	ITHACA
9) STEM	CELTUCE
10) LATIN	MATCHLESS

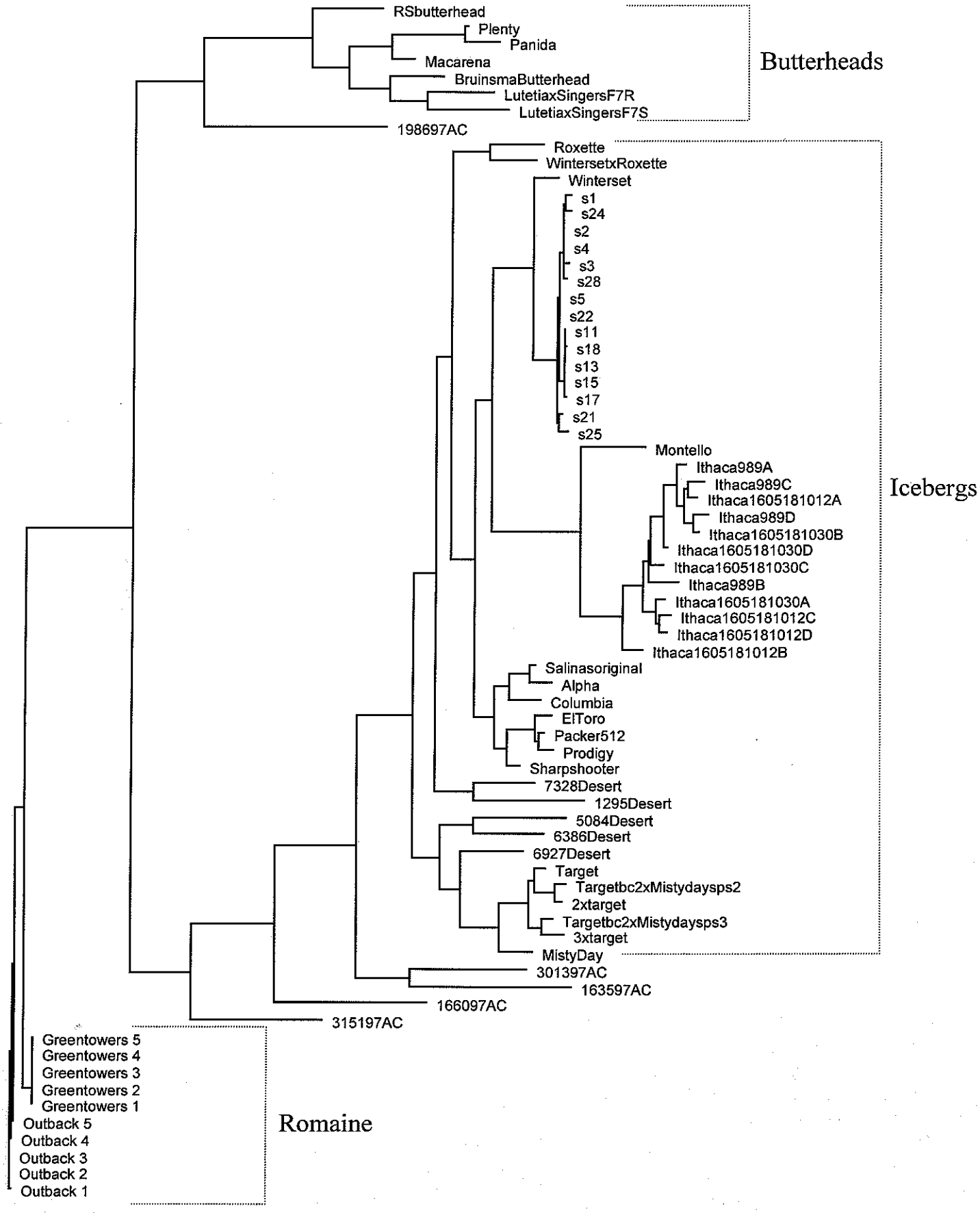
Item 12. Biochemical Data

Figure 1: A rooted dendrogram using PAUP software indicating the genetic distance among varieties.

The dendrogram indicates the genetic distance between and within three groups of lettuce – Butterhead, Iceberg and Romaine.

The dendrogram highlights that Outback (OB 1-5) differs from Green Towers (GT 1-5) using microsatellite technology.

Figure 1. Rooted Dendogram



U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)

RAD 6/27/05

~~Yates Vegetable Seeds~~ Enza Zaden Beheer B.V.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER

3. VARIETY NAME

Outback

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP, and Country)*

~~13/19 Chifley Street~~
~~Smithfield 2164 AUS~~

Gerrit Sassen
Enza Zaden Beheer B.V.
Enkhuizen
The Netherlands

5. TELEPHONE *(include area code)*

00.31.228.351318

6. FAX *(include area code)*

~~61297251066~~

RAD 6/27/05

7. PVPO NUMBER

200000249

8. Does the applicant own all rights to the variety? *Mark an "X" in appropriate block.* If no, please explain. ☑ YES ☐ NO

RAD 6/27/05

9. Is the applicant (individual or company) a U.S. national or U.S. based company? ☐ YES ☑ NO

If no, give name of country ~~Australia~~ Netherlands

10. Is the applicant the original owner? ☑ YES ☐ NO *If no, please answer one of the following:*

a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?

☐ YES ☐ NO If no, give name of country

b. If original rights to variety were owned by a company(ies), is(are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership *(if needed, use reverse for extra space)*:

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.

2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.

3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

STD-470-E (07-97) *(Destroy previous editions).*
Electronic version designed using WordPerfect InForms by USDA-AMS-IMB.

Form ST-(06/03)	RECORDATION FORM for Plant Variety Protection Office	U.S. DEPARTMENT OF AGRICULTURE PLANT VARIETY PROTECTION OFFICE

To the Commissioner of Plant Variety Protection: Please record the attached original documents or copy thereof.

1. Current Owner(s) of Record

Name Yates Vegetable Seeds

Address 13-19 Chifley Street
Smithfield 2164
Australia

Phone

FAX

E-mail

2. Type of Recordation:

___ Assignment
___ Security Interest, License, Grant, Conveyance
___ Merger
X Change of Name of Owner(s)
___ Revocation of Assignment, Security Interest, License, Grant, or Conveyance
___ Change of Address of Owner(s)
___ Change of Representative (and address)
___ Change of Address of Representative
___ Change of Variety Name (Denomination)
___ Election of "Certified Seed Only" Option
___ Other (specify) _____

Date Change went into Effect _____

3. New Owner(s)

Name Enza Zaden Beheer B.V.

Address P.O.Box 7, 1600 AA
Haling 1e, 1602 DB
Enkhuizen, The Netherlands

Phone 00 31 228 35 01 00

FAX 00 31 228 31 59 60

E-mail info@enzazaden.nl

4. New Representative

Name

Address

Phone

FAX

E-mail

7. List PVP Number(s), Crop Kind(s), Variety Name(s). Attach list if more space is needed.
[Please note that listed applications and certificates must be active. Recordations cannot be performed on inactive cases.]

200000249, lettuce, Outback

8. Total number of applications/certificates involved: 1 **Total Fee (97.175)** .....$_____

Fees must be paid in U.S. funds. Make checks payable to "Treasurer of the United States". We cannot accept payment by electronic fund transfer or credit card.

9. Statement and Signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Joep Lamballk
Name of Person Signing

Enza Zaden Beheer B.V.
Postbus 7
1600 AA Enkhuizen
The Netherlands
Signature

28-July-2005
Date

Mail documents to: Plant Variety Protection Office
NAL Building, Room 400
10301 Baltimore Blvd.
Beltsville, MD 20705-2351